Bruhat Bangalore Mahanagara Palike

Executive Engineer Yelahanka Project Division

me of Work: Improvements and Development to Shivanahalli village surrounding area in Ward No.01 Yelahanka Constituency

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
Civil Work								
SRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(I No-19.1, P No-143), 8km lead								
Basic rate	130.00							
Area Weightage 6%	7.80							
Loading and Unloding & Lead, 8KM	77.48							
Total	**215.28**							
	Cum							
RCC Drain								
Bande rd		2	365.00	1.10	1.10	883.30		
1st Cross rd		2	55.00	1.10	1.10	133.10		
2nd Cross rd		2	65.00	1.10	1.10	157.30		
3rd Cross rd		2	33.00	1.10	1.10	79.86		
Katteramma Temple rd								
1st Cross rd		2	48.00	1.00	1.00	96.00		
2nd Cross rd		1	36.00	1.00	1.00	36.00		
Hemanna Temple rd		1	170.00	1.10	1.10	205.70		
Bande Mariyamma Temple rd		1	720.00	1.10	1.10	871.20		
Maatru Layout Rd		2	245.00	1.10	1.10	592.90		
1st Main Rd		2	96.00	1.10	1.10	232.32		
1st Cross rd		2	40.00	1.00	1.00	80.00		
2nd Cross rd		2	35.00	1.10	1.10	84.70		
Gaibhaba Temple rd		2	81.00	1.00	1.00	162.00		
Culvert		19	6.00	1.50	1.10	188.10		
Maatru layout		1	9.00	2.00	1.10	19.80		
						3822.28	**215.28**	**822860.44**
SRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
Basic rate	5115.00							
Area Weightage 6%	306.90							
Total	**5421.90**							
	Cum							
RCC Drain								
Bande rd		2	365.00	1.10	0.15	120.45		
1st Cross rd		2	55.00	1.10	0.15	18.15		
2nd Cross rd		2	65.00	1.10	0.15	21.45		
3rd Cross rd		2	33.00	1.10	0.15	10.89		

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
Katteramma Temple rd								
1st Cross rd		2	48.00	1.00	0.15	14.40		
2nd Cross rd		1	36.00	1.00	0.15	5.40		
Hemanna Temple rd		1	170.00	1.10	0.15	28.05		
Bande Mariyamma Temple rd		1	720.00	1.10	0.15	118.80		
Matru Layout Rd		2	245.00	1.10	0.15	80.85		
1st Main Rd		2	96.00	1.10	0.15	31.68		
1st Cross rd		2	40.00	1.00	0.15	12.00		
3rd Cross rd		2	35.00	1.10	0.15	11.55		
Saibhaba Temple rd		2	81.00	1.00	0.15	24.30		
CC Road								
Shivanalli Rudra bhommi rd		1	230.00	3.80	0.15	131.10		
Matru Layout								
1st Main Rd		1	96.00	5.30	0.15	76.32		
Bande rd		1	365.00	4.80	0.15	262.80		
1st Cross rd		1	55.00	4.00	0.15	33.00		
2nd Cross rd		1	65.00	3.50	0.15	34.13		
3rd Cross rd		1	33.00	4.30	0.15	21.29		
Culvert		19	6.00	1.50	0.15	25.65		
Matru layout		1	9.00	2.00	0.15	2.70		
						1084.95	**5421.90**	**5882490.41**

Providing and laying plain/reinforced cement concrete for side drains using **M20 nominal mix concrete with OPC at 300 kgs**. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)

Basic rate	6670.00							
Area Weightage 6%	400.20							
Total	**7070.20**							
	Cum							
RCC Drain								
Raft								
Bande rd		2	365.00	0.90	0.15	98.55		
1st Cross rd		2	55.00	0.90	0.15	14.85		
2nd Cross rd		2	65.00	0.90	0.15	17.55		
3rd Cross rd		2	33.00	0.90	0.15	8.91		
Katteramma Temple rd								
1st Cross rd		2	48.00	0.80	0.15	11.52		
2nd Cross rd		1	36.00	0.80	0.15	4.32		
Hemanna Temple rd		1	170.00	0.90	0.15	22.95		
Bande Mariyamma Temple rd		1	720.00	0.90	0.15	97.20		
Matru Layout Rd		2	245.00	0.90	0.15	66.15		
1st Main Rd		2	96.00	0.90	0.15	25.92		
1st Cross rd		2	40.00	0.80	0.15	9.60		
3rd Cross rd		2	35.00	0.90	0.15	9.45		
Saibhaba Temple rd		2	81.00	0.80	0.15	19.44		
Wall								
Bande rd		4	365.00	0.90	0.15	197.10		

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
st Cross rd		4	55.00	0.90	0.15	29.70		
nd Cross rd		4	65.00	0.90	0.15	35.10		
rd Cross rd		4	33.00	0.90	0.15	17.82		
tteramma Temple rd								
st Cross rd		4	48.00	0.15	0.60	17.28		
nd Cross rd		2	36.00	0.15	0.60	6.48		
manna Temple rd		2	170.00	0.15	0.60	30.60		
nde Mariyamma Temple rd		2	720.00	0.15	0.60	129.60		
atru Layout Rd		4	245.00	0.15	0.60	88.20		
st Main Rd		4	96.00	0.15	0.60	34.56		
st Cross rd		4	40.00	0.15	0.60	14.40		
nd Cross rd		4	35.00	0.15	0.60	12.60		
ibhaba Temple rd		4	81.00	0.15	0.60	29.16		
						1049.01		
ulvert Raft		19	6.00	1.20	0.20	27.36		
atru layout		1	9.00	1.80	0.20	3.24		
ulvert Wall		38	6.00	0.23	0.60	31.46		
atru layout		1	9.00	0.23	0.60	1.24		
						63.31		
						1112.32	**7070.20**	**7864296.58**

RRB - M2300-14: **Providing TMT steel reinforcement** for R.C.C work including straightening, tting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with nding wire and anchoring to the adjoining memebrs wherever necessary complete as per design ps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of chinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)

Basic rate	69804.00							
Area Weightage 6%	4188.24							
Total	**73992.24**							
	Tn							
CC Drain								
Drain 60kg/cum			1049.01	0.06		62.94		
Culvert 90kg/cum			63.31	0.09		5.70		
						68.64	**73992.24**	**5078689.7**

viding and Fixing **pre cast covering Slab 100mm thick** made out of CC 1:2:4 and jelly 20mm own size with steel reinforcement including form work,curing,including cost of alll materials, our,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As Engineer incharge. (Data Rate)

Data rate	2337.00							
	Sqm							
CC Drain								
nde rd		2	365.00	0.90		657.00		
st Cross rd		2	55.00	0.90		99.00		
nd Cross rd		2	65.00	0.90		117.00		
st Cross rd		2	33.00	0.90		59.40		
tteramma Temple rd								
st Cross rd		2	48.00	0.75		72.00		
st Cross rd		1	36.00	0.75		27.00		
manna Temple rd		1	170.00	0.90		153.00		
nde Mariyamma Temple rd		1	720.00	0.90		648.00		

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
Matru Layout Rd		2	245.00	0.90		441.00		
1st Main Rd		2	96.00	0.90		172.80		
1st Cross rd		2	40.00	0.75		60.00		
3rd Cross rd		2	35.00	0.90		63.00		
Saibhaba Temple rd		2	81.00	0.75		121.50		
missing slabs		266	0.90	0.60		143.64		
						2834.34	**2337.00**	6623852.58
Providing and fixing **RCC precast cover slab of 250mm thick** for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
Data rate	5418.00							
	Sqm							
Culvert		19	6.00	1.20		136.80		
Matru layout		1	9.00	1.80		16.20		
						153.00	**5418.00**	828954.00
KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 8km lead= (I No-19.14,P No-143,KPWD SR 2018-19)								
Basic rate	41.00							
Area Weightage 6%	2.46							
8km Lead	20.48							
Total	**63.94**							
	Cum							
New Formation								
Hemanna Layout Rd		1	170.00	5.50	0.30	280.50		
Bande Mariyamma Temple rd		1	505.00	5.50	0.30	833.25		
		1	215.00	8.40	0.30	541.80		
Matru Layout Rd		1	245.00	5.30	0.30	389.55		
Overlay cut portion								
Shivanalli Main rd		2	330.00	1.00	0.30	198.00		
C.C Road								
New Formation								
Bande rd		1	365.00	4.80	0.30	525.60		
1st Cross rd		1	55.00	4.00	0.30	66.00		
2nd Cross rd		1	65.00	3.50	0.30	68.25		
3rd Cross rd		1	33.00	4.30	0.30	42.57		
						2945.52	**63.94**	188336.55
Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
Basic rate	1882.00							
Area Weightage 6%	112.92							
Total	**1994.92**							
	Cum							

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	
New Formation								
Hemanna Layout Rd		1	170.00	5.50	0.15	140.25		
Bande Mariyamma Temple rd		1	505.00	5.50	0.15	416.63		
		1	215.00	8.40	0.15	270.90		
Matru Layout Rd		1	245.00	5.30	0.15	194.78		
Overlay cut portion								
Shivanalli Main rd		2	330.00	1.00	0.15	99.00		
C.C Road								
Shivanalli Rudra bhommi rd		1	230.00	3.80	0.15	131.10		
Matru Layout								
1st Main Rd		1	96.00	5.30	0.15	76.32		
Bande rd		1	365.00	4.80	0.15	262.80		
1st Cross rd		1	55.00	4.00	0.15	33.00		
2nd Cross rd		1	65.00	3.50	0.15	34.13		
3rd Cross rd		1	33.00	4.30	0.15	21.29		
						1680.18	**1994.92**	**3351824.69**

KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)

Basic rate	1888.00
Area Weightage 6%	113.28
Total	**2001.28**

New Formation							
Hemanna Layout Rd		1	170.00	5.50	0.23	215.05	
Bande Mariyamma Temple rd		1	505.00	5.50	0.23	638.83	
		1	215.00	8.40	0.23	415.38	
Matru Layout Rd		1	245.00	5.30	0.23	298.66	
Overlay cut portion							
Shivanalli Main rd		2	330.00	1.00	0.23	151.80	
						1719.71	**2001.28**

KSRRB M500-6. Providing and **applying primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6), issue rate dated 01-07-2020

Basic rate	28.00
Area Weightage 6%	1.68
Total	**29.68**
	Sqm

New Formation							
Hemanna Layout Rd		1	170.00	5.50		935.00	
Bande Mariyamma Temple rd		1	505.00	5.50		2777.50	
		1	215.00	8.40		1806.00	
Matru Layout Rd		1	245.00	5.30		1298.50	
Overlay cut portion							
Shivanalli Main rd		2	330.00	1.00		660.00	
						FALSE	**29.68**

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
SRRB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared lack topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding leaning of road surface) including cost of all materials, labour, HOM complete as per specifications P.No-161,I No-21.7) issue rate dated 01-07-2020								
Basic rate	12.00							
Area Weightage 6%	0.72							
Total	**12.72**							
	Sqm							
lew Formation								
Hemanna Layout Rd		1	170.00	5.50		935.00		
Bande Mariyamma Temple rd		1	505.00	5.50		2777.50		
		1	215.00	8.40		1806.00		
Matru Layout Rd		1	245.00	5.30		1298.50		
Overlay cut portion								
Shivanalli Main rd		1	330.00	5.30		1749.00		
						8566.00	**12.72**	**108959.52**
SRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6), issue rate dated 01-07-2020								
Basic rate	6045.00							
Area Weightage 6%	362.70							
Total	**6407.70**							
	Cum							
lew Formation								
Hemanna Layout Rd		1	170.00	5.50	0.05	46.75		
Bande Mariyamma Temple rd		1	505.00	5.50	0.05	138.88		
		1	215.00	8.40	0.05	90.30		
Matru Layout Rd		1	245.00	5.30	0.05	64.93		
Overlay cut portion								
Shivanalli Main rd		2	330.00	1.00	0.05	33.00		
						373.85	**6407.70**	**2395518.65**
Providing and laying **bituminous concrete 40mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171,I No-21.78.12), issue rate dated 01-07-2020								
Basic rate	7111.00							
Area Weightage 6%	426.66							
Total	**7537.66**							
	Cum							
New Formation								
Hemanna Layout Rd		1	170.00	5.50	0.03	28.05		

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
Bande Mariyamma Temple rd		1	505.00	5.50	0.03	83.33		
		1	215.00	8.40	0.03	54.18		
Matru Layout Rd		1	245.00	5.30	0.03	38.96		
Overlay cut portion								
Shivanalli Main rd		1	330.00	5.30	0.04	69.96		
						274.47	**7537.66**	**2068861.54**
KSRRB M800-13.**Road Marking** with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
Basic rate	429.00							
Area Weightage 6%	25.74							
Total	**454.74**							
	Sqm							
New Formation								
Hemanna Layout Rd		2	170.00	0.10		34.00		
Bande Mariyamma Temple rd		2.5	505.00	0.10		126.25		
		2.5	215.00	0.10		53.75		
Matru Layout Rd		2	245.00	0.10		49:00		
Overlay cut portion								
Shivanalli Main rd		2	330.00	0.10		66.00		
						329.00	**454.74**	**149609.46**
KSRRB M200-24. **Dismantling of cement concrete pavement** by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. Loading and unloading with 8km lead= (I No-18.47,P No-140,KPWD SR 2018-19)								
Basic rate	899.00							
Area Weightage 6%	53.94							
8km Lead	20.48							
Total	**973.42**							
	Cum							
C.C Road								
Dismantling								
Shivanalli Rudra bhommi rd		1	230.00	3.80	0.20	174.80		
						174.80	**973.42**	**170153.82**

Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)								
Basic rate	4916.00							
Area Weightage 6%	294.96							
Total	**5210.96**							
	Cum							
C.C Road								
Shivanalli Rudra bhommi rd		1	230.00	3.80	0.15	131.10		
Matru Layout								
1st Main Rd		1	96.00	5.30	0.15	76.32		
New Formation								
Bande rd		1	365.00	4.80	0.15	262.80		
1st Cross rd		1	55.00	4.00	0.15	33.00		
2nd Cross rd		1	65.00	3.50	0.15	34.13		
3rd Cross rd		1	33.00	4.30	0.15	21.29		
						558.63	**5210.96**	**2910998.58**
							Total Construction Cost	**41887027.76**
							Towards GST 12%	**5026443.33**
							Towards Tender Premium 5%	**2094351.39**
							DPR & PMC Charges 2%	**992000.00**
							Sub Total	**49999822.48**
							Miscellaneous & Rounding Off	**177.52**
							Total	**50000000.00**

Technical Sanction
Accorded For R.S.Sanction
Head of A/C. D.2415
CER NO : 54 17-16
TA
CE (WNK)

Administrative Approval
Accorded For R.S. Sanction
Head of A/C.....D2415.....
CER NO :.....45..... Dt:...05/11/2020

S.E. (Project)

Certificate

1. The workspot was inspected and work is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 01-07-2020 and Data Rates

Assistant Engineer
Yelahanka Project Division
BBMP Bangalore

Asst. Executive Engineer
Yelahanka Project Division
BBMP Bangalore

Executive Engineer
Yelahanka Project Division
BBMP Bangalore